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# **POTENTIAL REVENUE IMPACTS OF THE PROPOSED NEW CORPORATE INCOME TAX LAW IN FEDERATION OF BOSNIA AND HERZEGOVINA**

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## 1. INTRODUCTION

This study analyzes the potential revenue impacts of changes proposed in the draft Corporate Income Tax Law (*the CIT law*) in the Federation of Bosnia and Herzegovina (*FBiH*).

The draft CIT Law proposes two key changes to the system currently in place under the Profit Tax Law:

- A reduction of the tax rate on enterprise income from 30 to 15%
- Elimination of the following tax holidays and special treatments (tax credits)<sup>1</sup>:

- ***Tax holiday for newly-founded companies;***

Corporate income tax is reduced for a newly established company, i.e., cooperative society, for the first year of business 100%, for the 2nd year of business 70% and for the 3rd year of business 30%.

- ***Tax holiday for companies operating in free zones;***

Free zones and users of free zones are exempted from paying the CIT by 100% for five years.

- ***Tax holiday for companies with investment from foreign entities;***

The taxpayer with whom a foreign entity invests capital and whose part in the total permanent capital of the taxpayer is at least 20%, the corporate income tax is decreased for the period of five years from the day of investing, proportionately with the participation of foreign capital in the total permanent capital of the taxpayer.

- ***Special treatment for reinvesting taxable profit;***

The taxpayer that invests the taxable profit in his/her own productive activities and construction of apartments, has this tax special treatment credited against the tax liability. Investment of the taxable profit in other own activities, is credited against the tax liability up to 75%.

- ***Special treatment of an equalizing tax.***

If the taxpayer - payer of dividends, has not paid the corporate income tax by the appropriate rate, he is obliged to calculate and bill the equalizing corporate profit tax that is meant for allocation by the rate of 27.27 %.

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<sup>1</sup> The draft Law retains only the credits intended to prevent double taxation of income. These credits are:  
-paid profit tax on profit realized from operations in third country  
-profit tax paid by resident office in the third country

All these tax holidays and special treatments are credited against the tax liability. They are not deductions from taxable profit. Once the tax holidays and special treatments are credited, the amount represents the CIT due.

This study shows that eliminating these credits will not only compensate for lowering the tax rate on enterprise income, but will also lead to far greater tax revenues.

## **2. METHODOLOGY**

To simulate the impact of the proposed changes on tax revenues, the authors built a simple model.

The total number of taxpayers-registered legal entities, liable for paying the CIT is app. 44,000. Out of that number, app. 7,000 have paid profit tax (16%).

The authors took a sample of 367 taxpayers headquartered in the four largest municipalities in Sarajevo Canton, two municipalities in Hercegovacko-Neretvanski Canton and one municipality in Zenicko-Dobojski Canton.

The sample data were taken from Form PR-PB (the “Tax Declaration for Corporate Income Tax and Tax Income Statement”) for 2003 for each taxpayer. The captured data were:

- Profit (line 19<sup>2</sup>);
- Loss from previous years (line 21);
- Tax base (line 25);
- Tax rate (30%);
- Calculated initial tax (line 26);
- Total Tax Credits (line 27) and structure of tax credits [line 27, a), b),c),d),e),f),g)]
- Tax after credit (line 28);
- Advance payments (line 30);
- Tax overpaid (line 32); and
- Tax due (line 31).

Using these data, the authors simulated the impact of the proposed changes on the sample, and then extrapolated the sample results to the entire population of profit taxpayers in the FBiH.

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<sup>2</sup> Lines referred to in parentheses correspond to line items in the Tax Income Statement on 2003 Form PR-PB.

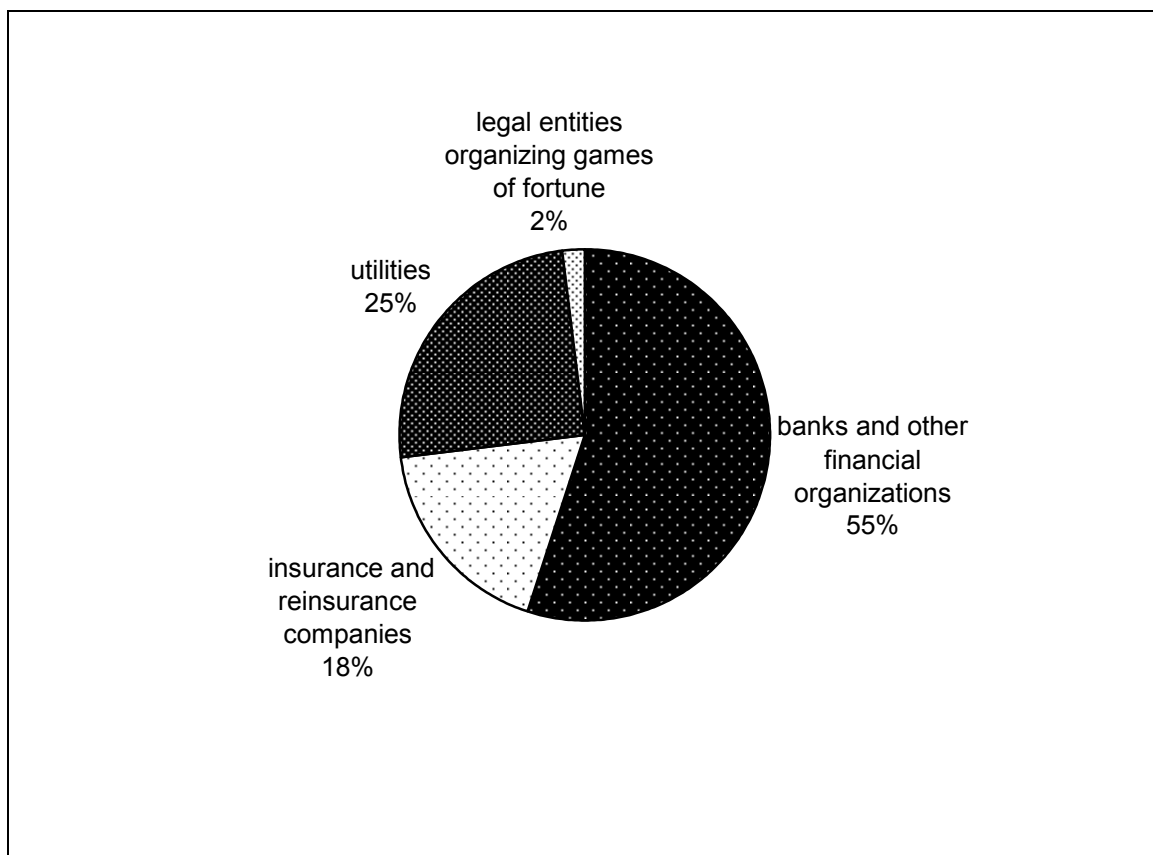
### 3. THE SAMPLE

The 367 taxpayers chosen for the sample fell into two main categories.

The first category was composed of “large taxpayers” that paid profit tax directly to the FBiH budget (Revenue Code 711911), including banks and other financial institutions; insurance and reinsurance companies; utilities; and, businesses engaged in organized gambling.

Large taxpayers form an important part of this analysis. While they represent less than 1% of registered businesses in the FBiH, in 2003 they accounted for nearly half of total profit tax revenues in the Entity. Therefore, out of 57 large taxpayers in the FBiH, 40 taxpayers, mostly located in Sarajevo Canton, were selected for the sample. (*See Figure 1*)

**Figure 1. Structure of the Large Taxpayer Sample by Industry**

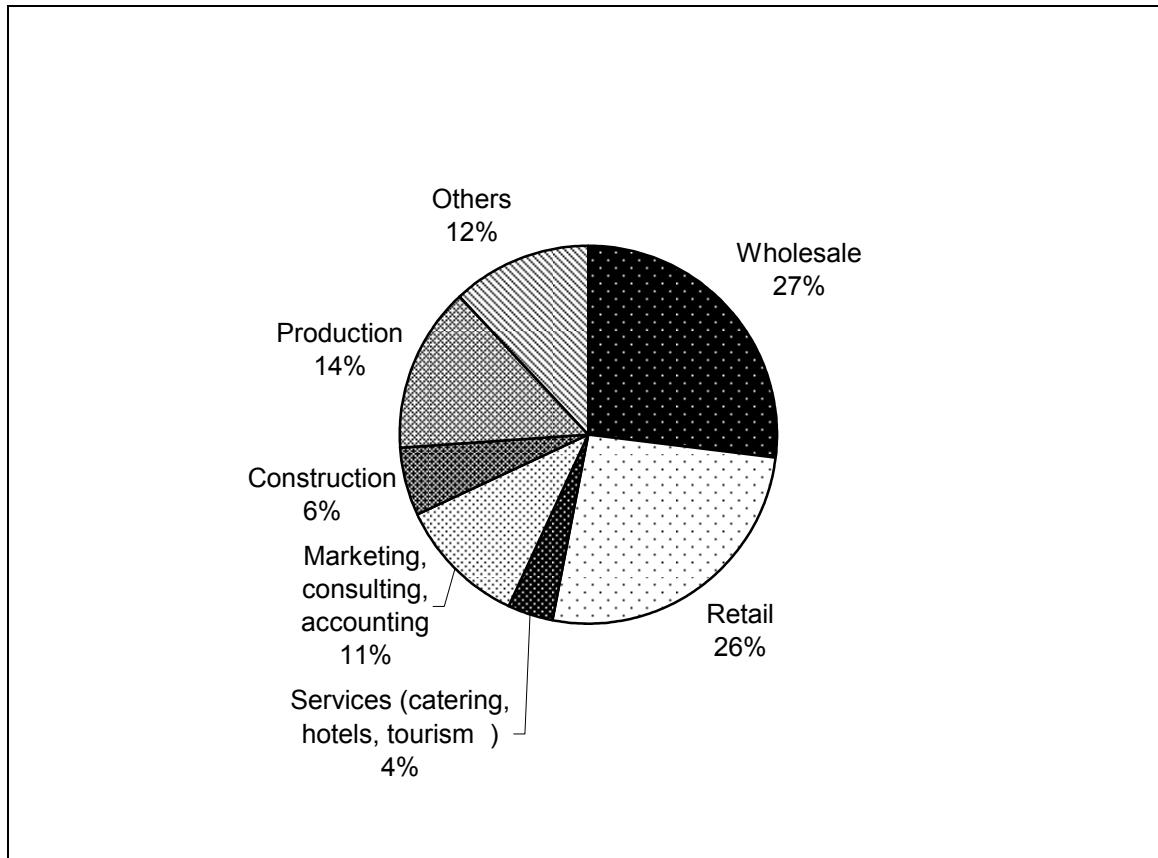


The second category of taxpayers included legal entities other than large taxpayers. Profit taxes collected from these taxpayers went directly to Cantonal budgets (Revenue Code 711211).

The common thread among taxpayers considered for the sample was that each reported taxable profits in 2003, regardless of whether they owed any tax after adjusting for business losses. Out

of 6,953 taxpayers in this category, 327 taxpayers, representing a wide range of industry sectors, were included in the sample. (*See Figure 2*).

**Figure 2. Structure of the Sample of Taxpayers by Industry (not large taxpayers)**



Sample data from Form PR-PB formed the basis for comparison of tax revenues under the current profit tax system with possible revenues under a system incorporating the changes proposed in the draft CIT Law.

**Table 1. Statistical Information****CURRENT SYSTEM****OVERALL SAMPLE**

	Taxable profit	Initial Tax	Total Tax Credits	a)*	b)*	c)*	d)*	e)*	f)*	g)*	Tax due
Total	358,671,892	107,601,568	86,287,224	624,491	0	13,418,669	71,881,636	27,716	12,071	322,641	21,314,344
Average	977,308	293,192	235,115								58,077
Minimum	0	0	0								0
Maximum	160,476,405	48,142,922	36,107,191								12,035,731
Standard deviation	8,661,155	2,598,346	1,988,426								639,080

**LARGE COMPANIES**

	Taxable profit	Initial Tax	Total Tax Credits	a)	b)	c)	d)	e)	f)	g)	Tax due
Total	275,016,864	82,505,059	64,975,429	16,670	0	9,850,015	55,076,134	27,716	4,894	0	17,529,630
Average	6,875,422	2,062,626	1,624,386								438,241
Minimum	0	0	0								0
Maximum	160,476,405	48,142,922	36,107,191								12,035,731
Standard deviation	28,095,272	8,551,832	6,391,931								2,097,295

**OTHER COMPANIES**

	Taxable profit	Initial Tax	Total Tax Credits	a)	b)	c)	d)	e)	f)	g)	Tax due
Total	83,655,028	25,096,508	21,311,795	607,821	0	3,568,654	16,805,502	0	7,177	322,641	3,784,714
Average	255,826	76,748	65,174								11,574
Minimum	0	0	0								0
Maximum	10,095,545	3,028,664	3,028,664								269,789
Standard deviation	876,817	188,349	300,005								22,071

**Table 2. – Statistical Information**

<b>POSSIBLE SYSTEM</b>											
<b>OVERALL SAMPLE</b>											
	Taxable profit	Initial Tax	Total Tax C	a)	b)	c)	d)	e)	f)	g)	Tax due
Total	358,671,892	53,800,784	39,787	0	0	0	0	27,716	12,071	0	53,760,997
Average	977,308	146,596	108								146,488
Minimum	0	0	0								0
Maximum	160,476,405	24,071,461	27,716								24,071,461
Standard deviation	8,661,155	1,299,173	1,560								1,337,518
<b>LARGE COMPANIES</b>											
	Taxable profit	Initial Tax	Total Tax C	a)	b)	c)	d)	e)	f)	g)	Tax due
Total	275,016,864	41,252,530	32,610	0	0	0	0	27,716	4,894	0	41,219,920
Average	6,875,422	1,031,313	815								1,030,498
Minimum	0	0	0								0
Maximum	160,476,405	24,071,461	27,716								24,071,461
Standard deviation	28,095,272	4,275,916	1,557								1,337,518
<b>OTHER COMPANIES</b>											
	Taxable profit	Initial Tax	Total Tax C	a)	b)	c)	d)	e)	f)	g)	Tax due
Total	83,655,028	12,548,254	7,177	0	0	0	0	0	7,177	0	12,541,077
Average	255,826	38,374	22								38,352
Minimum	0	0	0								0
Maximum	10,095,545	1,514,332	7,177								1,514,332
Standard deviation	876,817	188,349	409								130,543



***Legend of Tax Credits***

\* (a) through (g) correspond to the following tax credits:

- a) Tax holiday for newly-founded companies
- b) Tax holiday for companies operating in free zones
- c) Tax holiday for companies with investment from foreign entities
- d) Special treatment for reinvesting taxable profit
- e) Paid profit tax on profit realized from operations in third country
- f) Profit tax paid by resident office in the third country
- g) Special treatment of an equalizing tax

## 4. IMPACT OF PROPOSED CHANGES

### a. Overall sample

The main items considered for this comparison were (i) initial tax and, (ii) tax after credits.

#### **Initial Tax** (*see Tables 1 and 2, Overall Sample*)

Initial tax is the amount obtained by multiplying the profit tax base by the tax rate.<sup>3</sup>

At the 30% tax rate, the average initial tax for the sample was 0.3 million KM, and the standard deviation<sup>4</sup> was 2.6 million KM. The maximum value for a single taxpayer was 48 million KM, and the minimum value was “0”.<sup>5</sup>

Applying the 15% tax rate, the average and the standard deviation were cut in half. The maximum value also fell by 50%, while the minimum value remained “0”.

#### **Tax after Credits** (*see Tables 1 and 2, Overall Sample*)

Tax after credits refers to the tax amount due after subtracting tax credits from the initial tax calculation.

At the 30% tax rate, tax after credits for the sample averaged 0.06 million KM, while the standard deviation was 0.6 million KM. The maximum tax after credits for a single taxpayer was 12 million KM, and the minimum value was “0”.

Eliminating the five tax credits mentioned above and applying the 15% tax rate, the average tax after credits increased 150%, and the standard deviation more than doubled. The maximum tax after credits also doubled, while the minimum value remained “0”.

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<sup>3</sup> The tax base is equal to taxable profit less business losses.

<sup>4</sup> The standard deviation measures how widely values vary from the average value (the mean) for a sample.

<sup>5</sup> Taxpayers with a “0” initial tax calculation claimed business losses that were greater in value than their taxable profit.

Under the current profit tax system, credits taken by the 367 taxpayers that make up the sample amounted to 80% of the total initial tax calculation. In other words, the total tax due after credits came to only 20% of total initial tax.

Out of the seven credits available under the current system, two in particular—those for companies with investment from foreign entities and for companies reinvesting taxable profit—accounted for 99% of the total value of credits taken. The reinvestment credit alone accounted for 84% of the total.

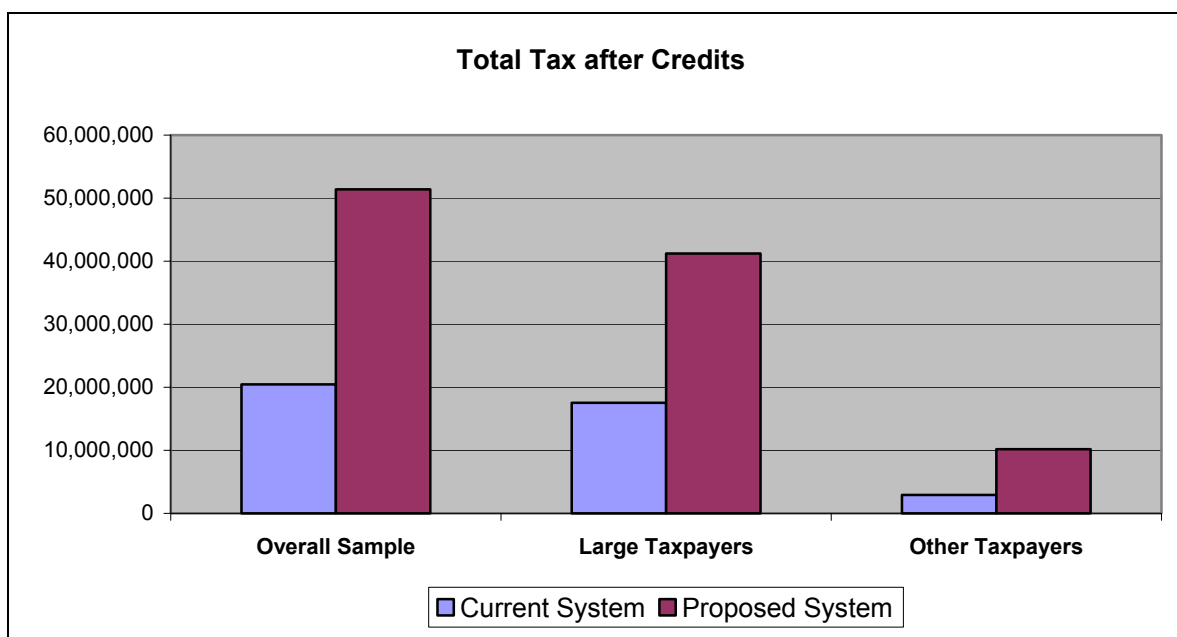
Under the system proposed in the draft CIT Law, credits account for less than 1% of total initial tax for the sample. Furthermore, total tax after credits increases more than 150%, from 20 million KM to 54 million KM, despite the lowering of the tax rate from 30 to 15%. (*See Figure 3 and Tables 1 and 2*)

#### **b. Large taxpayers**

While large taxpayers constitute only 11% of the entire sample, in the current system they account for 77% of the initial tax, and for 82% of the total tax due after credits. Under the proposed system, large taxpayers account for 77% of both initial tax and tax after credits.

Under the current system, the total credits taken by large taxpayers account for nearly 80% of the total initial tax for the entire sample of large taxpayers. With the proposed changes in the draft CIT Law, total credits fall to less than 1% of total initial tax. Moreover, total tax due after credits increases more than 135%, from 17.5 million to 41.2 million KM. (*See Figure 3 and Tables 1 and 2*)

**Figure 3. Total Tax after Credits for Overall Sample, Large Taxpayers and Other Taxpayers**



### c. Other taxpayers

While other taxpayers constitute 89% of the entire sample, in the current system they account only for 23% of the initial tax, and for 18% of the total tax due after credits. Under the proposed system, other taxpayers account for 23% of both initial tax and tax after credits.

Under the current system, the total credits taken by other taxpayers account for 85% of the total initial tax for the entire sample of other taxpayers. With the proposed changes in the draft CIT Law, total credits fall to less than 0.06% of total initial tax. Moreover, total tax due after credits increases approximately 230%, from 3.8 million to 12.5 million KM. (*See Figure 3 and Tables 1 and 2*)

## 5. FEDERATION-WIDE IMPACT & CONCLUSIONS

### a. Extrapolation Methodology

To model the Federation-wide impact of the proposed changes, we extrapolated the sample data for the four Sarajevo municipalities to the entire population of profit taxpayers in Sarajevo Canton. The same extrapolation was done for Zenicko-Dobojski and Hercegovacko-Neretvanski Cantons.

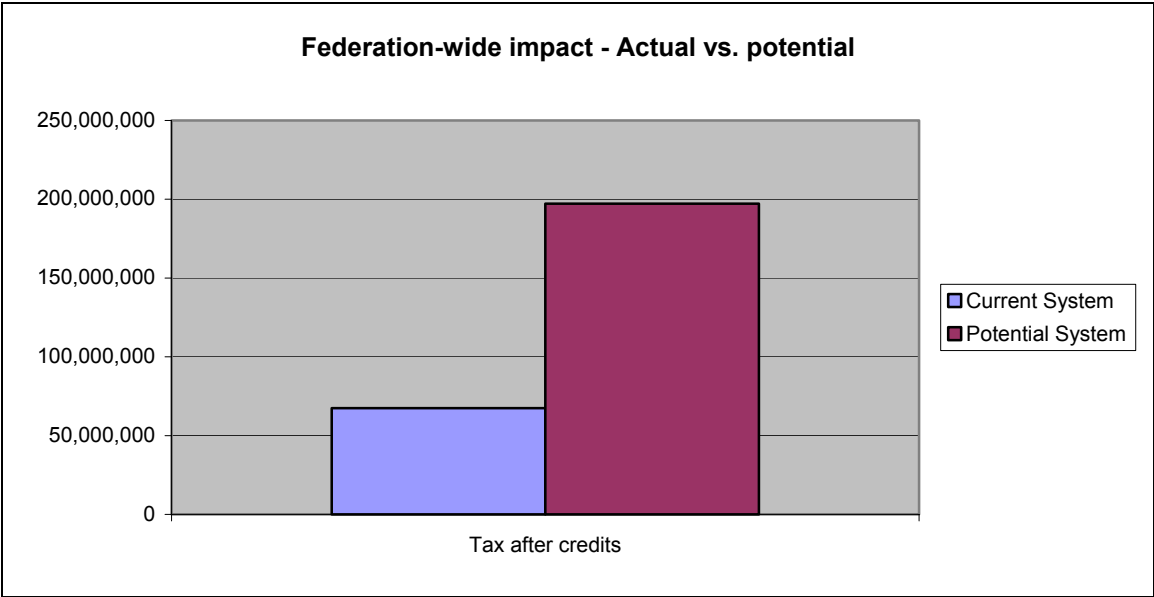
Based on the extrapolation for the three Cantons, we then extrapolated the sample to project profit tax revenues under the proposed system for the entire Federation. RAS data for profit tax revenues were used to calculate the coefficients needed for the extrapolation.

**b. Extrapolation Results**

Based on the extrapolation, credits (tax holidays and special treatments) represent 83% of total initial tax in the FBiH under the current profit tax system. Credits for companies with investment from foreign entities and for companies reinvesting profits account for 99% of total credits claimed. The reinvestment credit alone accounts for 84% of the total credits.

With the proposed changes to the CIT Law, credits fall to 0.06% of the value of total initial tax for taxpayers throughout the Federation. Furthermore, total tax due after credits increases nearly three-fold compared to the current system. *(See Table 3 and Figure 4)*

**Figure 4. Federation-wide impact**



**Table 3. FBiH-wide impact of proposed changes**

EXTRAPOLATION OF THE SAMPLE TO THE ENTIRE FBiH						
CURRENT SYSTEM						
Tax base	Tax rate	Initial Tax	Credits (a,b,c,d,g)*	Credits (e,f)*	Tax after credits	
1,315,425,272	30%	394,627,582	327,055,616	122,875	67,449,091	
POSSIBLE SYSTEM						
Tax base	Tax rate	Initial Tax	Credits (a,b,c,d,g)*	Credits (e,f)*	Tax after credits	
1,315,425,272	15%	197,313,791	0	122,875	197,190,916	
Difference (absolute value)					129,741,825	
Difference (percentage)					192%	

\* (a) through (g) correspond to the following tax credits:

- a) Tax holiday for newly-founded companies
- b) Tax holiday for companies operating in free zones
- c) Tax holiday for companies with investment from foreign entities
- d) Special treatment for reinvesting taxable profit
- e) Paid profit tax on profit realized from operations in third country
- f) Profit tax paid by resident office in the third country
- g) Special treatment of an equalizing tax